Alcohol (2010 Dietary Guidelines Advisory Committee)

Overview, Needs for Future Research

Overview:

The 2010 Dietary Guidelines Advisory Committee (DGAC) recognized that alcohol affects many health outcomes, due both to the acute effects of alcohol in the bloodstream and to the chronic effects of regular alcohol consumption. Many associations with disease are well known and well documented. Therefore, the sub-committee (SC) examined a few specific questions where a new evidence review could modify conclusions from previous DGAC Reports. In addition, the SC chose those specific health outcomes that would be most influenced by moderate alcohol consumption of up to one drink a day for women and two drinks a day for men, where changes in recommendations would have the broadest impact.

Although the 2005 DGAC summary of the health effects of alcohol consumption were based on an evidence-based review, in many instances these reviews included a substantial number of cross-sectional studies. Since 2005, a large number of prospective studies of alcohol and chronic disease have been published. Thus, to refine the evidence search for each question, the DGAC limited the reviews to studies with greater methodological rigor and only conducted systematic reviews of observational prospective studies and randomized control trials. The exception was the question related to alcohol intake and unintentional injury because cross-sectional or case-control studies are of equal or even better validity. For the question related to alcohol consumption and coronary heart disease (CHD), only systematic reviews and meta-analyses were used, since the Nutrition Evidence Library (NEL) literature search found several recent studies.

Needs for Future Research:

- 1. Conduct a comprehensive set of studies in a controlled setting to assess the influences that alcohol may have on factors that affect energy intake and expenditure.
 - Rationale: The effects of energy from alcohol on body weight are complex and not completely understood. These studies will clarify whether the lack of association between moderate alcohol consumption and weight gain is due to biological compensation or changes in other behaviors (e.g., diet or physical activity).
- ? Conduct recearch to enhance the currently limited data on changes in

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- markers of bone health in metabolic studies of alcohol consumption.
 - Rationale: In large epidemiological studies, a better classification of drinking pattern and a better documentation of the traumatic or non-traumatic cause of fracture are needed, but equally important is the need to study prospectively changes in alcohol consumption and changes in intermediate markers of bone structure and integrity.
- 3. Focus further research to avoid unintentional injury on effective communication policies that expand current messages on drinking and driving to inform individuals of other unintentional risks associated with alcohol consumption.
 - **Rationale:** The documented benefit of drunk driving campaigns is a public health success, yet alcohol-related injury is still substantial in other areas and should be addressed with the same vigilance and governmental support.

Librarian

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